

WHAT IS CLAIMED IS:

1. A substantially pure nucleotide sequence which comprises a P-PII coding sequence.

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2. The substantially pure nucleotide sequence of claim 1 wherein said P-PII coding sequence comprises

- a) the nucleotide sequence depicted in Figure 12 from nucleotide residue numbers 33 to 620;
- 10 b) a nucleotide sequence encoding a polypeptide having the amino acid sequence designated At depicted in Figure 1; or
- c) a nucleotide sequence that selectively hybridizes to the sequence depicted in Figure 12 from nucleotide residue numbers 33 to 620 under
15 moderate-stringency conditions.

3. The substantially pure nucleotide sequence of claim 1 wherein said P-PII coding sequence comprises

- a) the nucleotide sequence depicted in Figure 13 from nucleotide residue numbers 50 to 643;
- 20 b) a nucleotide sequence encoding a polypeptide having the amino acid sequence designated Ric depicted in FIG. 1; or
- c) a nucleotide sequence that selectively hybridizes to the nucleotide sequence depicted in FIG. 13 from
25 nucleotide residue numbers 50 to 643 under moderate-stringency conditions.

4. A substantially purified nucleotide construct which comprises the nucleotide sequence of any of claims 1 to
30 3 and a heterologous promoter element, wherein said heterologous promoter element is operably linked to said P-

PII coding sequence and regulates the transcription of said P-PII coding sequence.

5 5. A host cell having the nucleotide construct of claim 4.

6. The host cell of claim 5 which expresses said P-PII coding sequence of said expression construct.

10 7. A substantially pure polypeptide comprising the amino acid sequence depicted in Figure 8 (SEQ ID NO:3).

8. A substantially pure polypeptide comprising the amino acid sequence depicted in Figure 9 (SEQ ID NO:4).

15 9. A transgenic plant in which the transgene comprises a DNA sequence of Claim 2 operatively linked with a regulatory sequence that controls gene expression so that the DNA sequence of Claim 2 is expressed by the transgenic plant.

20 10. A transgenic plant in which the transgene comprises a DNA sequence of Claim 3 operatively linked with a regulatory sequence that controls gene expression so that the DNA sequence of Claim 3 is expressed by the transgenic plant.

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